

SAN JOSÉ / SANTA CLARA WATER POLLUTION CONTROL PLANT



CITY OF SAN JOSÉ
ENVIRONMENTAL SERVICES DEPARTMENT
ENVIRONMENTAL ENFORCEMENT PROGRAM

CONTRIBUTING AGENCIES

CITY OF SAN JOSÉ
CITY OF SANTA CLARA
COUNTY SANITATION DIST. NO. 2 - 3
BURBANK SANITARY DISTRICT
CUPERTINO SANITARY DISTRICT
City of Cupertino
CITY OF MILPITAS
SUNOL SANITARY DISTRICT
WEST VALLEY SANITATION DISTRICT
Cities of Campbell, Los Gatos
Monte Sereno and Saratoga

January 15, 2004

Bruce H. Wolfe, Executive Officer
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

Dear Mr. Wolfe:

SUBJECT: NPDES Permit Provision E.3: Lab Reliability Evaluation for Aldrin

The San Jose/Santa Clara Water Pollution Control Plant's NPDES Permit Order No R2-2003-0085 Provision E.3 contains requirements to conduct a laboratory reliability evaluation to provide documentation to verify the accuracy and reliability of laboratory data (inter- and intra- laboratory calibration) for Aldrin. The purpose of this correspondence is to submit our reliability evaluation report describing the results of replicate analytical determinations for EPA Method 608 organo-chlorine pesticides performed between October 2002 and December 2003.

The report discusses the degree of variability with pesticide measurement between three commercial laboratories using the same standard analytical methodology and measuring matching wastewater samples. The evaluation found that while one laboratory sporadically indicated the presence of organochlorine pesticides, the other two laboratories found no quantifiable concentrations for these contaminants. The report describes the analytical complexities and difficulties that can be encountered as reporting limits are driven lower and lower for the determination of trace level organic pollutants in wastewater. The report concludes that other technical information beyond routine measurements for laboratory accuracy and precision may be needed to determine the absence or presence of a detected pesticide.

The City of San Jose looks forward to continuing our collaborative working relationship with the Regional Board on this and other important environmental issues. The City also requests the



Bruce H. Wolfe
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opportunity to discuss the report's findings at your convenience. If you have comments and/or questions on this report, please contact David Tucker (408-945-3711) of my staff.

Sincerely,

A handwritten signature in black ink, appearing to read 'R. Shipes', with a large, sweeping flourish extending from the end of the signature.

RANDOLPH SHIPES
Deputy Director
Environmental Services Department

cc: Linda Rao



**San Jose/Santa Clara Water Pollution Control Plant
Lab Reliability Evaluation for Aldrin**

Submission to the
California Regional Water Quality Control Board,
San Francisco Bay Region
Provision E 3 of Order No: R2-2003-0085

January 2004

City of San Jose
Environmental Services Department
SJ/SC Water Pollution Control Plant
700 Los Esteros Road
San Jose, CA
95134

Laboratory Reliability Evaluation for Aldrin

Background

The 1998 NPDES Permit for the San Jose/Santa Clara Water Pollution Control Plant (Plant) required twice yearly monitoring for “organic priority pollutants” as defined by 40 CFR S122. This provision imposed monitoring for dioxin, pesticides, polychlorinated biphenyls, polycyclic aromatic hydrocarbons, semi-volatile organic compounds, and volatile organic compounds. In March 2002, the effluent compliance results obtained from a commercial contract laboratory indicated the presence of the pesticide Aldrin. The analytical result derived, 0.032 ug/L, was above the contract laboratory’s Minimum Limit (ML) of 0.005 ug/L and above the applicable water quality objective of 0.00014 ug/L.

Subsequently, Plant personnel informed Regional Board staff of their contention that the commercially obtained value was suspect for the following reasons:

- Aldrin was not detected in an influent sample collected during the same period as the effluent sample (no influent-effluent correlation);
- Aldrin has been banned for sale and use for several decades and would not be expected in the wastewater stream;
- Aldrin concentration reported by contract laboratory would indicate a highly improbable and fairly significant discharge to the collection system of a federally-banned substance; and
- Aldrin had not been detected in the effluent prior to this incident (see Table 1).
- Dieldrin, the principal breakdown product from Aldrin, was not detected concurrently as one would expect.

In lieu of any formal regulatory action, Regional Board staff endorsed the Plant’s proposal to conduct an inter-laboratory comparison for Method EPA 608 between three different laboratories. The principle objective of this evaluation was to determine laboratory competency to provide accurate and precise analytical results for trace-level pesticide measurement.

Aldrin is the most common name for the substance composed of at least 95% of the chemical 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-*exo*-1,4-*endo*-5,8-dimethano-naphthalene. Similarly, dieldrin refers to the substance composed of at least 85% of the chemical 1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-*endo*-1,4-*exo*-5,8-dimethanonaphthalene. Dieldrin, a stereoisomer of endrin, was typically produced by the epoxidation of aldrin with peracetic or

perbenzoic acid. In their “pure” formulations, both aldrin and dieldrin are composed of clear-to-white crystals with densities greater than water, and both have low volatilities and aqueous solubilities.

Aldrin and dieldrin are synthetic organochlorine pesticides that act as effective contact and stomach poisons for insects. Originally, they were used as broad-spectrum soil insecticides for the protection of various food crops, as seed dressings, to control infestations of pests like ants and termites, and to control several insect vectors of disease. In 1972, the EPA cancelled all but three specific uses of these compounds (subsurface termite control, dipping of non-food plant roots and tops, and completely contained moth-proofing in manufacturing processes), which by 1987 were voluntarily cancelled by the manufacturer. Use of these compounds peaked in the U.S. during 1966 at 19 million pounds for aldrin and 1 million pounds for dieldrin. These compounds have not been produced domestically since 1974, and while some importation of aldrin began during that year, this ceased after 1985.

Under most environmental conditions, aldrin is largely converted via biological and/or abiotic mechanisms to dieldrin, which is significantly more persistent. Most environmental releases of aldrin and dieldrin are directly to soil. Because of low water solubility and tendency to bind strongly to soils, both compounds migrate downward very slowly through soils or into surface or ground water. Most surface water concentrations of these pesticides have been attributed to particulate surface run-off. Over time, it is possible that significant volatilization of aldrin/dieldrin might occur, with subsequent atmospheric photodegradation and/or rainfall “washout.” Collectively, these characteristics will foster low levels of aldrin/dieldrin water contamination over comparatively extended periods of time.

Evaluation Overview

In August 2002, the Plant increased its monitoring frequency for EPA Method 608 contaminants from semi-annually to monthly in order to further evaluate the analytical capabilities of the contract laboratory responsible for the Aldrin data in question. Effluent monitoring for August 28, 2002 indicated a detectable concentration of the pesticide Aldrin at 0.027 ug/L, as well as a detectable concentration of the pesticide Alpha-BHC at 0.035 ug/L, which had also never been detected in the Plant’s effluent. Influent and effluent samples collected on September 3, 2002, and measured by the same commercial laboratory, did not indicate the presence of any EPA Method 608 pesticides. Results for an influent sample collected concurrently on September 3, 2002 also indicated no detectable EPA Method 608 contaminants. However, a sample collected on October 1, 2002, and analyzed by the same commercial laboratory, indicated detectable concentrations for five separate pesticides in the low part-per-trillion range.

In October 2002, the Plant supplemented its pesticide monitoring with triplicate analyses for both influent and effluent samples collected concurrently each month. These replicate analyses would serve as the foundation for a reliability evaluation to

ascertain the analytical capabilities for EPA Method 608 by three contract laboratories. This information would also be used to develop a compliance evaluation strategy to describe the elements necessary for the determination of "true" pesticide detection. The laboratory reliability evaluation would be conducted over a period of at least one year, culminating in a draft technical report for Regional Board review.

On September 17, 2003, the Regional Board adopted Final Order No. R2-2003-0085 that revised the NPDES Permit for the Plant. To appropriately address the remaining uncertainty and validity of the organochlorine pesticide data, as it relates to reasonable potential and effluent limitations, the following provision was included in the permit:

Lab Reliability Evaluation for Aldrin

Task	Deadline
a. The Discharger shall conduct a lab reliability study and submit a report, acceptable to the Executive Officer. This evaluation shall provide documentation to verify the data accuracy and reliability of laboratory data (inter and intra-lab calibration) for aldrin. The evaluation shall identify the laboratory (or laboratories) that will perform consistent and reliable analysis and the rationale for their selection, their QA/QC protocols, and the steps to be taken (e.g., resampling and retesting) if invalid data are generated.	January 15, 2004
b. The Discharger shall submit a report acceptable to the Executive Officer that identifies sources of aldrin influent to the Plant and that proposes a work plan for how those sources will be reduced and controlled.	Within 180 days of reliable detection of aldrin above current WQC

The following sections present the data and results for the Plant's Laboratory Reliability Evaluation for Aldrin conducted between October 2002 and December 2003.

Evaluation Approach

Sampling Locations:

Influent and effluent samples for this evaluation were collected using standard methods for grab sampling. Sampling locations were A-001 and E-001 as defined by the facility's NPDES permit, and represent the Plant's influent and effluent, respectively. All samples for this study were collected during Plant peak flow, operationally defined at 1400 hours.

Sample Collection and Handling:

The sample collection for EPA Method 608 pesticides was performed following standard collection methods as referenced in 40 CFR Part 136.3. Amber glass bottles (1 liter) with Teflon lined caps were used for sample storage. Representative samples were collected into the pre-cleaned containers from the appropriate flow stream after flushing the stream for one minute or longer. The bottles were then capped and cooled to 4°C. Samples were then sent to the three contract laboratories in coolers packed with dry ice via overnight delivery. Samples were collected monthly between October 2002 and December 2003.

Analytical Method

The contract laboratories all used EPA Method 608 with solvent extraction, identification with two separate analytical columns in parallel, and analyte detection with electron capture. Although the EPA Method discusses the use of a mass spectrometer to confirm the identification (qualitative determination) of representative pesticides, mass spectrometry cannot be used in this instance because of the extremely low concentrations found in the Plant effluent.

EPA Method 608 covers the determination of certain PCBs and organochlorine pesticides (including aldrin and dieldrin). This is a gas chromatographic (GC) method applicable to the determination of contaminants in municipal and industrial discharges as provided by 40 CFR Part 136.1. When EPA Method 608 is used to analyze unfamiliar samples for any or all of the method's compounds, compound identifications should be supported by at least one additional qualitative technique. EPA Method 608 also describes analytical conditions for a second GC column that can be used to confirm measurements made with the primary column. EPA Method 625 also provides gas chromatograph/mass spectrometer (GC/MS) conditions appropriate for the qualitative and quantitative confirmation of results for all of the parameters listed in Method 608. However, in this study the pesticide concentrations were too low for accurate measurement by conventional GC/MS, and a separate analytical column with electron capture detection was used for confirmation purposes. The method detection limit (MDL, defined in Section 14.1) for each parameter is listed in Table 2. The MDLs for a specific wastewater sample may differ from those listed, depending upon the nature of interferences in the sample matrix.

Method interferences may be caused by contaminants in solvents, reagents, glassware, and other sample processing hardware that lead to discrete artifacts and/or elevated baselines in gas chromatograms. All of these materials must be routinely demonstrated to be free from interferences under the conditions of the analysis by running laboratory reagent blanks as described. Glassware must be scrupulously cleaned. The use of high purity reagents and solvents helps to minimize interference problems. Purification of solvents by distillation in all-glass systems may be required. Interferences by phthalate esters can pose a major problem in pesticide analysis when using the electron capture detector. Avoiding the use of plastics in the laboratory can best minimize interferences from phthalates. The extent of matrix interferences will

vary considerably from source to source, depending upon the nature and diversity of the industrial complex or municipality being sampled. The cleanup procedures can be used to overcome many of these interferences, but unique samples may require additional cleanup approaches to achieve the MDLs listed in Table 2.

Results and Discussion

Influent and effluent samples were sent to three contract laboratories for EPA Method 608 analysis each month between October 2002 and December 2003. The three contract laboratories utilized for this evaluation were:

Toxscan Inc. (Watsonville CA)
East Bay Municipal Utility District (EBMUD) Laboratory (Oakland CA)
Caltest Analytical Laboratory (Napa.CA)

Influent analytical data for EPA Method 608 from the three laboratories is presented in Appendix I. Effluent analytical data for EPA Method 608 from the three laboratories is presented in Appendix II. Laboratory quality assurance and quality control data for these analyses has been summarized in tables and graphs and is presented in Appendix III.

Quality Assurance and Quality Control (QA/QC)

Quality assurance/quality control sample results for each of the three laboratories were generally within targeted values and ranges for the chlorinated pesticides analyzed in this study. With regard to method contamination, each contract laboratory reported that these contaminants were not detected in the method blanks employed throughout the study period. See Appendix III for tables and graphs summarizing the quality assurance/quality control data generated during this study.

Matrix spike results, spiked either to a clean matrix like the procedural blank or a matrix such as wastewater effluent, were also generally within targeted ranges (within ~50% of the expected value). Because quantities of analytes spiked need to be sufficiently above MDLs to generate quantitative results, spiked concentrations were generally larger (typically 0.050-0.200 ug/L) than the concentrations of analytes found in wastewater samples evaluated in this study, which were generally near or below a laboratory's respective detection limits and minimum levels.

The matrix spike and matrix spike duplicate information for two of the three contract laboratories is presented in Appendix III. Actual reported matrix recoveries ranged from approximately 20% to 110% over the duration of the study. Each laboratory possessed its own distinctive acceptance range and all the QC data fell within their accepted ranges for matrix recovery. Caltest reported a recovery acceptance range from 10% to 93% during the last half of the evaluation, and varied between 30% to 130% during the first half of the study. Toxscan's acceptance range was consistent between 40% and 120%. EBMUD did not have an established acceptance limits specifically for aldrin matrix recovery. Similarly, acceptance criteria for precision,

using relative percent difference, were 25% for Caltest and 22% for Toxscan. A Method detection limit for the three contract laboratories was also quite comparable for each of the EPA Method 608 target compounds. For comparative purposes, data quality elements for the San Francisco Bay Regional Monitoring Program for Trace Substances (RMP) are presented in Table 3.

Results and Discussion

Results for the analysis of EPA Method 608 pesticides is shown in Appendix I and Appendix II for influent and effluent, respectively. The majority of target compounds were not detected in most wastewater samples analyzed by the laboratories under evaluation. Generally, agreement between analytical results for all three laboratories was not encountered during this study. Agreement between results for two of the three was observed. However, this agreement represents not detecting any of the target compounds above respective MLs. Results from the evaluation can be summarized as follows:

CALTEST

- Did not detect any EPA 608 pesticides in either the influent or effluent above respective MLs.

EBMUD

- Detected Aldrin, Gamma-BHC, Dieldrin and Endosulfan in the effluent but could not quantify measurements [below ML's].
- Detected 4,4-DDT, 4,4-DDE, and Endosulfan in the influent but could not quantify the measurements [below ML's].
- No correlation between effluent and influent detection observed.

TOXSCAN

- Detected Aldrin, Alpha-BHC, Beta-BHC, Delta-BHC, Gamma-BHC, 4,4-DDE, and Dieldrin in the effluent above respective ML's.
- Detected Aldrin, Gamma-BHC, 4,4-DDT, 4,4-DDE, Dieldrin, Endosulfan Sulfate, Endrin, Endrin Aldehyde, Heptachlor and Heptachlor Epoxide in the effluent but could not quantify the measurements [below ML's].
- Detected Aldrin, Alpha-BHC, Beta-BHC, Gamma-BHC, Chlordane, 4,4-DDE, Dieldrin, Endrin Aldehyde and Heptachlor in the influent above respective ML's.
- Detected Aldrin, Delta-BHC, Gamma-BHC, Chlordane and 4,4-DDE in the influent but could not quantify the measurements [below ML's].
- Little correlation between effluent and influent detection observed.

The detection of a target compound by two or more of the participating laboratories would have provided a degree confidence in the certainty of the results, even if they had differed quantitatively. This is especially true since the three laboratories were following the same standard procedure, EPA Method 608, and similar results would have been expected. Furthermore, the three laboratories possessed similar MDLs and identical MLs throughout the study, and once more similar results would have been expected.

Another possibility for the differences in laboratory results is the potential for contamination during collection, storage and/or analysis. If contamination had occurred during collection and storage, it would have been expected to affect all replicate samples sent out for analysis, which was not observed for this study as evidenced by the dissimilarity in laboratory results. Procedural contamination at the laboratory cannot be discounted, however, method blank results for each of the contract laboratories did not support the contention of analytical contamination.

Correlation of results between influent and effluent samples was not observed during this study. Seasonal correlations were also not evidenced by the data but the sample frequency may not have been sufficient to ascertain seasonal relationships.

An examination of Toxscan's data since October 2002 indicates that 85% of the reported data indicating the presence of quantifiable pesticides was produced between October and November 2002. Furthermore, if one assumes that reliable data for this chromatographic method can only be obtained greater than 10x MDL [see rationale discussed below] for any method analyte, only the measurement for Lindane at 0.041 in March 2003 would require additional scrutiny from an environmental interest. Note that the applicable water quality standard for Lindane (Gamma-BHC) is 0.063 ug/L and no further examination would be necessary.

In 1999 and 2000 the three South Bay POTW dischargers, along with the Fairfield-Suisun Sewer District, conducted a special investigation to determine the reproducibility of analytical determinations of certain organic pollutants. Trace level monitoring using ultra clean procedures and state-of-the-art analytical methods was employed in the measurement of dioxins, organochlorine pesticides, PAHs and PCBs. RMP laboratories at AXYS Analytical, Texas A&M University and the University of Utah provided the research-level services for this study, which was administered by staff from the San Francisco Estuary Institute. The detailed report for the South Bay/Fairfield-Suisun Trace Organic Contaminants in Effluent Study was submitted to the Regional Board in April 2001. Instrument detection limits for the organochlorine pesticides were in the low pg/L range for this study, approximately 1000X lower than typically available from commercial contract laboratories. Both Texas A&M and Utah utilized electron capture detection following gas chromatographic separation. Results regarding organochlorine pesticide analysis can be summarized as follows:

- High inter-laboratory analytical variability was observed with RSDs frequently above 50% for individual compounds, with many

compounds not being quantified due to matrix interferences or likely erroneous values.

- No significant statistical differences between sampling events could be determined due to the relatively large analytical differences between each laboratory's measurements.
- The large number of possible erroneous values, matrix interferences, and non-detects precluded a meaningful comparison among samples.
- High-resolution mass spectrometry appeared less prone to quantitation difficulties and errors due to matrix interferences.
- In addition to routine determinations for accuracy and precision, a degree of professional judgment is still required to evaluate the reliability of reported data within the context of historical information and other internal and external checks.

The inherent inadequacies of this chromatographic method with electron capture, at the lower limits of target compound detectability, may be responsible for the high degree of variability observed between contract laboratories. Excerpts from the South Bay/ Fairfield-Suisun Trace Organic Contaminants in Effluent Study illustrate this issue further:

Because identification of compounds using an electron capture detection (ECD) method is made primarily by retention time, and the mixture of compounds in environmental samples is complex and unpredictable, often there are possibilities for co-elution with known and unknown interfering compounds during analyses. Chromatographic methods using ECD often benefit from confirmation using a second column of a different length or stationary phase material, where shifts in retention time may be sufficient to separate target analytes from interfering compounds.

Because analyses of organic contaminants at trace levels are often susceptible to biases that may not be detected by conventional QA measures, additional QA review is necessary to ensure the integrity of the reported data. Based on knowledge of the chemical characteristics and typical relative concentrations of organic contaminants in environmental samples, concentrations of the target contaminants can be compared to results for related compounds to identify potentially erroneous data.

Interference caused by matrix constituents or co-elution of compounds on the column is a common obstacle to quantifying trace concentrations of organic contaminants, especially when electron-capture detectors are used. When results are reported outside the range of expected relative concentrations, and the laboratory cannot identify the source of variability, values can be qualified to indicate uncertainty in the results. If the reported concentrations deviate greatly from the expected range and are clearly higher than observed in past analyses or current sample splits, it can be reasonably concluded that the results are erroneous.

As a final point, each of the three contract laboratories were asked to comment on the reliability of data for low level organochlorine analysis near the Method Detection Limit (MDL) or the Minimum Level (ML). Staff from two of the contract laboratories used in this study responded that concentrations less than ten times the MDL were very susceptible to false positives. The calculation of an MDL is based solely upon the variability (standard deviation) around blank or spike results in a clean laboratory matrix (highly dependant upon the spiking level). For that reason, the methodology commonly provides an estimate of detection that is well below the lowest level that a compound can be qualitatively detected in a complex environmental matrix (wastewater effluent). Furthermore, the MDL procedure has also been criticized by the analytical community for not adequately considering qualitative information, not properly accounting for bias, and not capturing all sources of variability for routine laboratory operations. Therefore, false positive values are expected to be more prominent as lower and lower reporting limits are pursued.

The principal purpose of the ML is to provide reasonable protection against false positive results due to measurement error. The State Implementation Policy lists MLs for regulatory purposes that were derived from the laboratory community in California. These MLs represent the 20th percentile of laboratory data submitted by 59 of 120 facilities contacted. The 20th percentile was selected as an acceptable compromise point that would facilitate increased analytical sensitivity. However, the ML value has been operationally defined as the lowest standard routinely used in calibration curves for the determination of the contaminant under consideration. Moreover, the ML has no direct connection to accuracy and precision, and therefore may not satisfy its intended purpose to prevent false positive results from being reported.

Conclusions

Results of this study demonstrate the analytical complexities and difficulties that may be encountered, especially as reporting limits are pushed lower and lower for the determination of organic contaminants in wastewater effluents. The inter-laboratory comparisons for the influent and effluent samples analyzed over the study period demonstrated a significant degree of variability for the two wastewater matrices examined. Furthermore, agreement between the three laboratories can best be summarized as either the organochlorine contaminants were not detected (agreement between two laboratories) or their presence was possible but could not be independently verified (detected by only one laboratory). In either of these instances, customary and routine measurement tools for laboratory accuracy and precision could not technically support the presence or absence of a detected pesticide. Furthermore, and as discussed above *“a degree of professional judgment is still required to evaluate the reliability of reported data within the context of historical information and other internal and external checks.”*

For this study the following guideposts were used to evaluate the reliability of the organochlorine pesticide data reported:

- Generally, organochlorine pesticides were not measured in influent and effluent samples collected concurrently (weak influent-effluent correlation);
- Organochlorine pesticides detected above respective ML values have been banned for sale and use for several decades and would not be expected to be present in the wastewater streams;
- The concentration ranges of organochlorine pesticides reported would indicate a highly improbable and fairly significant sporadic discharge of federally-banned substances to the collection system;
- Organochlorine pesticides have not been detected in the effluent prior to this incident by state certified laboratories using federally-mandated, standardized procedures;
- Organochlorine pesticides measured previously using ultra clean procedures and state-of-the-art analytical methods were detected at concentrations typically 100-1000x lower than the data produced during this investigation; and
- Presence and/or expected ratios between parent pesticide compounds and their breakdown daughter products were not consistent.

Therefore, and in accordance with the above discussion, this study concludes that all the EPA Method 608 organochlorine analyses conducted by Toxscan may be of questionable validity, that this data be qualified as “suspect data “and that this data not be used further for regulatory purposes.

Evaluation of Reliability

The study results for the Laboratory Reliability Evaluation for Aldrin illustrate the difficulties inherently possible when comparing low-level contract laboratory results obtained using EPA Method 608. It is highly unlikely a commercial laboratory would significantly improve its analytical performance without a financial incentive and increased marketability for modifying its service levels. Tightening data quality objectives significantly could have considerable cost implications as well as prolonged turn-around times. Using ultra clean procedures and state-of-the-art analytical methods (high resolution GC/MS) probably would not fulfill federal Clean Water Act monitoring requirements. Reliance on replicate analyses from two or more laboratories, as in this evaluation, would not likely resolve issues of inconsistent results between vendors. Supplementing routine analyses with spiked samples could significantly increase monitoring costs and would require spiking for each compound

of interest. Subsequently, data quality objects for composite method recovery ranges would then need to be developed, a difficult scientific endeavor in itself.

Therefore, this evaluation recommends the following:

- NPDES Permit monitoring for organochlorine pesticides (EPA Method 608) will be accomplished using the services of two contract laboratories during this permit cycle.
- Inter-laboratory determinations will be performed for both influent and effluent samples.
- In addition to the routine evaluation of laboratory accuracy and precision, professional judgment will be used to evaluate the reliability of reported data within the context of historical information and other internal and external guideposts as discussed above.
- If “suspect” data is encountered, monitoring frequency will be increased to monthly until agreement of results between laboratories is maintained for two consecutive months.

Table 1. Effluent Monitoring Results (ug/L)

Sample Date	Aldrin	Dieldrin	Laboratory
02/19/98	<0.050	<0.010	CLS Labs
02/26/98	<0.050	<0.010	CLS Labs
03/05/98	<0.050	<0.010	CLS Labs
03/12/98	<0.050	<0.010	CLS Labs
04/22/98	<0.008	<0.010	Toxscan
04/29/98	<0.002	<0.010	Toxscan
05/06/98	<0.002	<0.010	Toxscan
05/14/98	<0.002	<0.010	Toxscan
05/20/98	<0.002	<0.010	Toxscan
05/27/98	<0.002	<0.010	Toxscan
03/01/99	<0.025	<0.010	In-House
09/01/99	<0.025	<0.010	In-House
03/08/00	<0.025	<0.010	In-House
09/06/00	<0.025	<0.010	In-House
03/06/01	<0.025	<0.010	Toxscan
09/05/01	<0.005	<0.010	Toxscan
03/05/02	0.032	<0.010	Toxscan

Table 2. EPA Method 608 Chromatographic Method Detection Limits (ug/L)

Compound	MDL
Aldrin	0.004
Alpha- BHC	0.003
Beta-BHC	0.006
Delta-BHC	0.009
Gamma-BHC	0.004
Chlordane	0.014
4,4-DDT	0.012
4,4-DDE	0.004
4,4-DDD	0.011
Dieldrin	0.002
Endosulfin (alpha)	0.014
Endosulfin (beta)	0.004
Endosulfin Sulfate	0.066
Endrin	0.006
Endrin Aldehyde	0.023
Heptachlor	0.003
Heptachlor Epoxide	0.082
Toxaphene	0.24

Table 3. RMP QA/QC Control Criteria for Organic Compounds

Sample	Measure	Frequency	Criteria
Method Blank	Contamination by reagents, lab ware, etc.	One per batch	<MDL or <30% of the lowest sample, up to 2x MDL
Instrument Blank	Cross contamination	NA	Set by laboratory
Replicates	Precision	One per Batch	RSD <35%
Matrix Spike	Accuracy	One per 20 samples	Recovery within \pm 50% for spikes at 10X MDL
Surrogate Spike	% Recovery used to adjust sample results	One per sample	Set by laboratory

Appendix I

Organochlorine Pesticide Analyte List

Raw Sewage		Lab	Aldrin			Alpha-BHC			Beta-BHC			Delta-BHC			Gamma-BHC (Lindane)			Chlordane		
Criterion (ug/L; ppb)			0.00014			0.013			0.046			NA			0.063			0.00059		
Analytical Method			EPA 608			EPA 608			EPA 608			EPA 608			EPA 608			EPA 608		
Units			ug/L			ug/L			ug/L			ug/L			ug/L			ug/L		
Date	Julian		MDL	ML	Result	MDL	ML	Result	MDL	ML	Result	MDL	ML	Result	MDL	ML	Result	MDL	ML	Result
03/05/02	64	Toxscan	0.0017	0.005	ND	0.0071	0.010	ND	0.0050	0.005	ND	0.0016	0.005	ND	0.0031	0.010	ND	0.090	0.10	ND
08/28/02	240	Toxscan	0.0017	0.005		0.0071	0.010		0.0050	0.005		0.0016	0.005		0.0031	0.010		0.090	0.10	
09/03/02	246	Toxscan	0.0017	0.005	ND	0.0071	0.010	ND	0.0050	0.005	ND	0.0016	0.005	ND	0.0031	0.010	ND	0.090	0.10	ND
10/01/02	274	Toxscan*	0.0017	0.005		0.0071	0.010		0.0050	0.005		0.0016	0.005		0.0031	0.010		0.090	0.10	
10/16/02	289	Toxscan	0.0017	0.005	ND	0.0071	0.010	0.010	0.0050	0.005	0.014	0.0016	0.005	ND	0.0031	0.010	ND	0.090	0.10	ND
10/16/02	289	Caltest	0.003	0.025	ND	0.003	0.05	ND	0.004	0.025	ND	0.002	0.025	ND	0.003	0.05	ND	0.005	0.10	ND
10/16/02	289	EBMUD	0.0018	0.0050	ND	0.00061	0.010	ND	0.0010	0.0050	ND	0.00064	0.0050	ND	0.0031	0.020	ND	0.014	0.10	ND
11/06/02	310	Toxscan	0.0017	0.01	0.075	0.0071	0.020	0.26	0.0050	0.01	ND	0.0016	0.01	ND	0.0033	0.020	ND	0.090	0.20	ND
11/06/02	310	Caltest	0.003	0.025	ND	0.003	0.05	ND	0.004	0.025	ND	0.002	0.025	ND	0.003	0.05	ND	0.005	0.10	ND
11/06/02	310	EBMUD	0.0018	0.0050	ND	0.00061	0.010	ND	0.00064	0.0050	ND	0.00064	0.0050	ND	0.0031	0.020	ND	0.014	0.10	ND
12/03/02	337	Toxscan	0.0017	0.005	ND	0.0071	0.010	ND	0.005	0.005	ND	0.0016	0.005	ND	0.0031	0.010	ND	0.090	0.10	ND
12/03/02	337	Caltest	0.003	0.025	ND	0.003	0.05	ND	0.004	0.025	ND	0.002	0.025	ND	0.003	0.05	ND	0.005	0.10	ND
12/03/02	337	EBMUD	0.0018	0.0050	ND	0.00061	0.010	ND	0.00064	0.0050	ND	0.00064	0.0050	ND	0.0031	0.020	ND	0.014	0.10	ND
12/17/02	351	Toxscan	0.0017	0.005	ND	0.0071	0.010	ND	0.005	0.005	ND	0.0016	0.005	ND	0.0031	0.010	ND	0.090	0.10	ND
12/17/02	351	Caltest	0.003	0.025	ND	0.003	0.05	ND	0.004	0.025	ND	0.002	0.025	ND	0.003	0.05	ND	0.005	0.10	ND
12/17/02	351	EBMUD	0.0018	0.0050	ND	0.00061	0.010	ND	0.00064	0.0050	ND	0.00064	0.0050	ND	0.0031	0.020	ND	0.014	0.10	ND
01/07/03	7	Toxscan	0.0017	0.005	ND	0.0071	0.010	ND	0.005	0.005	ND	0.0016	0.005	ND	0.0031	0.010	0.013	0.090	0.10	ND
01/07/03	7	Caltest	0.003	0.01	ND	0.003	0.01	ND	0.004	0.01	ND	0.002	0.01	ND	0.003	0.01	ND	0.005	0.02	ND
01/07/03	7	EBMUD	0.0018	0.0050	ND	0.00061	0.010	ND	0.00064	0.0050	ND	0.00064	0.0050	ND	0.0031	0.020	ND	0.014	0.10	ND
02/04/03	35	Toxscan*	0.0017	0.005	0.005	0.0071	0.010	ND	0.005	0.005	ND	0.0016	0.005	ND	0.0031	0.010	ND	0.090	0.10	ND
02/04/03	35	Caltest*	0.003	0.005	ND	0.003	0.05	ND	0.004	0.05	ND	0.002	0.05	ND	0.003	0.05	ND	0.005	0.5	ND
02/04/03	35	EBMUD*	0.0091	0.025	ND	0.0030	0.050	ND	0.00520	0.025	ND	0.0032	0.025	ND	0.016	0.10	ND	0.070	0.50	ND
03/04/03	63	Toxscan	0.0017	0.0050	ND	0.0071	0.010	ND	0.005	0.005	ND	0.0016	0.005	ND	0.0031	0.010	ND	0.090	0.10	ND
03/04/03	63	Caltest	0.003	0.005	ND	0.003	0.01	ND	0.004	0.005	ND	0.002	0.005	ND	0.003	0.01	ND	0.005	0.02	ND
03/04/03	63	EBMUD	0.0091	0.025	ND	0.0030	0.050	ND	0.00520	0.025	ND	0.0032	0.025	ND	0.016	0.10	ND	0.070	0.50	ND
04/01/03	91	Toxscan	0.0017	0.005	ND	0.0071	0.010	ND	0.005	0.005	ND	0.0016	0.005	0.0044	0.0031	0.010	0.0070	0.0032	0.010	0.0033
04/01/03	91	Caltest	0.006	0.05	ND	0.003	0.05	ND	0.004	0.05	ND	0.002	0.05	ND	0.003	0.05	ND	0.005	0.5	ND
04/01/03	91	EBMUD	0.0091	0.025	ND	0.0030	0.050	ND	0.00520	0.025	ND	0.0032	0.025	ND	0.016	0.10	ND	0.070	0.50	ND
05/06/03	126	Toxscan	0.0017	0.0050	ND	0.0071	0.010	ND	0.0050	0.0050	ND	0.0016	0.0050	ND	0.0031	0.010	ND	0.090	0.10	ND
05/06/03	126	Caltest	0.003	0.005	ND	0.003	0.01	ND	0.004	0.005	ND	0.002	0.005	ND	0.003	0.01	ND	0.005	0.02	ND
05/06/03	126	EBMUD	0.018	0.050	ND	0.0061	0.10	ND	0.010	0.050	ND	0.0064	0.050	ND	0.031	0.20	ND	0.14	1.0	ND
06/03/03	154	Toxscan	0.0017	0.0050	ND	0.0071	0.010	ND	0.0050	0.0050	ND	0.0016	0.0050	ND	0.0031	0.010	0.0042	0.090	0.10	ND
06/03/03	154	Caltest	0.006	0.05	ND	0.003	0.05	ND	0.004	0.05	ND	0.002	0.05	ND	0.003	0.05	ND	0.005	0.5	ND
06/03/03	154	EBMUD	0.0091	0.0250	ND	0.0030	0.050	ND	0.0052	0.025	ND	0.0032	0.025	ND	0.016	0.10	ND	0.070	0.50	ND
07/02/03	183	Toxscan	0.0017	0.0050	ND	0.0071	0.010	ND	0.0050	0.0050	ND	0.0016	0.0050	ND	0.0031	0.010	ND	0.090	0.10	ND
07/02/03	183	Caltest	0.006	0.05	ND	0.003	0.05	ND	0.004	0.05	ND	0.002	0.05	ND	0.003	0.05	ND	0.005	0.5	ND
07/02/03	183	EBMUD	0.0091	0.0250	ND	0.0030	0.050	ND	0.0052	0.025	ND	0.0032	0.025	ND	0.016	0.10	ND	0.070	0.50	ND
08/05/03	217	Toxscan	0.0017	0.0050	ND	0.0071	0.010	0.012	0.0050	0.0050	0.0062	0.0016	0.0050	ND	0.0031	0.010	ND	0.0032	0.010	0.0080
08/05/03	217	Caltest	0.006	0.05	ND	0.003	0.05	ND	0.004	0.05	ND	0.002	0.05	ND	0.003	0.05	ND	0.005	0.5	ND
08/05/03	217	EBMUD	0.0091	0.0250	ND	0.0030	0.050	ND	0.0052	0.025	ND	0.0032	0.025	ND	0.016	0.10	ND	0.070	0.50	ND
09/03/03	246	Toxscan	0.0017	0.0050	ND	0.0071	0.010	0.021	0.0050	0.0050	0.085	0.0016	0.0050	ND	0.0031	0.010	ND	0.0032	0.010	ND
09/03/03	246	Caltest	0.006	0.05	ND	0.003	0.05	ND	0.004	0.05	ND	0.002	0.05	ND	0.003	0.05	ND	0.005	0.5	ND
09/03/03	246	EBMUD	0.0091	0.0250	ND	0.0030	0.050	ND	0.0052	0.025	ND	0.0032	0.025	ND	0.016	0.10	ND	0.070	0.50	ND
10/07/03	280	Toxscan	0.0017	0.0050	ND	0.0071	0.010	ND	0.0050	0.0050	ND	0.0016	0.0050	ND	0.0031	0.010	ND	0.0032	0.010	ND

Organochlorine Pesticide Analyte List

Raw Sewage		Lab	Aldrin			Alpha-BHC			Beta-BHC			Delta-BHC			Gamma-BHC (Lindane)			Chlordane		
Criterion (ug/L; ppb)			0.00014			0.013			0.046			NA			0.063			0.00059		
Analytical Method			EPA 608			EPA 608			EPA 608			EPA 608			EPA 608			EPA 608		
10/07/03	280	Caltest	0.006	0.1	ND	0.003	0.10	ND	0.004	0.1	ND	0.002	0.1	ND	0.003	0.10	ND	0.005	1.0	ND
10/07/03	280	EBMUD	0.0091	0.050	ND	0.0030	0.10	ND	0.0052	0.050	ND	0.0032	0.050	ND	0.016	0.20	ND	0.070	1.0	ND
11/04/03	308	Toxscan	0.0017	0.0050	ND	0.0071	0.010	ND	0.0050	0.0050	ND	0.0016	0.0050	ND	0.0031	0.010	0.012	0.0032	0.010	0.012
11/04/03	308	Caltest	0.006	0.12	ND	0.003	0.12	ND	0.004	0.12	ND	0.002	0.12	ND	0.003	0.12	ND	0.005	0.1	ND
11/04/03	308	EBMUD	0.018	0.050	ND	0.0061	0.10	ND	0.0050	0.010	ND	0.0064	0.050	ND	0.031	0.20	ND	0.14	1.0	ND

*: two duplicates data average value

: not available

xxxx Detected

xxxx Detected, Not Quantified

Organochlorine Pesticide Analyte List

Raw Sewage		Lab	4,4'-DDT			4,4'-DDE			4,4'-DDD			Dieldrin			Endosulfan (alpha)			Endosulfan (beta)		
Criterion (ug/L; ppb)			0.00059			0.00059			0.00084			0.00014			0.0087			0.0087		
Analytical Method			EPA 608			EPA 608			EPA 608			EPA 608			EPA 608			EPA 608		
Units			ug/L			ug/L			ug/L			ug/L			ug/L			ug/L		
Date	Julian		MDL	ML	Result	MDL	ML	Result	MDL	ML	Result	MDL	ML	Result	MDL	ML	Result	MDL	ML	Result
03/05/02	64	Toxscan	0.0150	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	ND	0.0008	0.010	ND	0.0018	0.010	ND
08/28/02	240	Toxscan	0.0150	0.020		0.0059	0.010		0.0021	0.010		0.0012	0.010		0.0008	0.010		0.0018	0.010	
09/03/02	246	Toxscan	0.0150	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	ND	0.0008	0.010	ND	0.0018	0.010	ND
10/01/02	274	Toxscan*	0.0150	0.020		0.0059	0.010		0.0021	0.010		0.0012	0.010		0.0008	0.010		0.0018	0.010	
10/16/02	289	Toxscan	0.0150	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	0.017	0.0008	0.010	ND	0.0018	0.010	ND
10/16/02	289	Caltest	0.003	0.05	ND	0.002	0.05	ND	0.002	0.05	ND	0.002	0.05	ND	0.002	0.05	ND	0.002	0.05	ND
10/16/02	289	EBMUD	0.0013	0.010	ND	0.00097	0.050	ND	0.00077	0.050	ND	0.00077	0.010	ND	0.00067	0.020	ND	0.00055	0.010	ND
11/06/02	310	Toxscan	0.0032	0.040	ND	0.0059	0.020	ND	0.0021	0.020	ND	0.0012	0.020	ND	0.0008	0.020	ND	0.0018	0.020	ND
11/06/02	310	Caltest	0.003	0.05	ND	0.002	0.05	ND	0.002	0.05	ND	0.002	0.05	ND	0.002	0.05	ND	0.002	0.05	ND
11/06/02	310	EBMUD	0.0013	0.010	ND	0.00097	0.050	ND	0.00077	0.050	ND	0.00077	0.010	ND	0.00067	0.020	ND	0.00055	0.010	ND
12/03/02	337	Toxscan	0.015	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	ND	0.0008	0.010	ND	0.0018	0.010	ND
12/03/02	337	Caltest	0.003	0.05	ND	0.002	0.05	ND	0.002	0.05	ND	0.002	0.05	ND	0.002	0.05	ND	0.002	0.05	ND
12/03/02	337	EBMUD	0.0013	0.010	ND	0.00097	0.050	ND	0.00077	0.050	ND	0.00077	0.010	ND	0.00067	0.020	ND	0.00055	0.010	ND
12/17/02	351	Toxscan	0.015	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	ND	0.0008	0.010	ND	0.0018	0.010	ND
12/17/02	351	Caltest	0.003	0.05	ND	0.002	0.05	ND	0.002	0.05	ND	0.002	0.05	ND	0.002	0.05	ND	0.002	0.05	ND
12/17/02	351	EBMUD	0.0013	0.010	ND	0.00097	0.050	ND	0.00077	0.050	ND	0.00077	0.010	ND	0.00067	0.020	ND	0.00055	0.010	ND
01/07/03	7	Toxscan	0.015	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	0.060	0.0008	0.010	ND	0.0018	0.010	ND
01/07/03	7	Caltest	0.003	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND
01/07/03	7	EBMUD	0.0013	0.010	ND	0.00097	0.050	ND	0.00077	0.050	ND	0.00077	0.010	ND	0.00067	0.020	ND	0.00055	0.010	ND
02/04/03	35	Toxscan*	0.015	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	ND	0.0008	0.010	ND	0.0018	0.010	ND
02/04/03	35	Caltest*	0.003	0.1	ND	0.002	0.1	ND	0.002	0.1	ND	0.002	0.1	ND	0.002	0.05	ND	0.002	0.1	ND
02/04/03	35	EBMUD*	0.0064	0.050	ND	0.0048	0.25	ND	0.0038	0.25	ND	0.0038	0.050	ND	0.0033	0.10	ND	0.0028	0.050	ND
03/04/03	63	Toxscan	0.032	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	ND	0.0008	0.010	ND	0.0018	0.010	ND
03/04/03	63	Caltest	0.003	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND
03/04/03	63	EBMUD	0.0064	0.050	ND	0.0048	0.25	ND	0.0038	0.25	ND	0.0038	0.050	ND	0.0033	0.10	ND	0.0028	0.050	0.015
04/01/03	91	Toxscan	0.0032	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	ND	0.00080	0.010	ND	0.0018	0.010	ND
04/01/03	91	Caltest	0.003	0.1	ND	0.002	0.1	ND	0.002	0.1	ND	0.002	0.1	ND	0.002	0.05	ND	0.002	0.1	ND
04/01/03	91	EBMUD	0.0064	0.050	ND	0.0048	0.25	ND	0.0038	0.25	ND	0.0038	0.050	ND	0.0033	0.10	ND	0.0028	0.050	ND
05/06/03	126	Toxscan	0.0032	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	ND	0.00080	0.010	ND	0.0018	0.010	ND
05/06/03	126	Caltest	0.003	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND
05/06/03	126	EBMUD	0.013	0.10	ND	0.0097	0.50	ND	0.0077	0.50	ND	0.0077	0.10	ND	0.0067	0.20	ND	0.0055	0.10	ND
06/03/03	154	Toxscan	0.0032	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	0.051	0.00080	0.010	ND	0.0018	0.010	ND
06/03/03	154	Caltest	0.003	0.1	ND	0.002	0.1	ND	0.002	0.1	ND	0.002	0.1	ND	0.002	0.05	ND	0.002	0.1	ND
06/03/03	154	EBMUD	0.0064	0.050	ND	0.0048	0.25	ND	0.0038	0.25	ND	0.0038	0.050	ND	0.0033	0.10	ND	0.0028	0.050	ND
07/02/03	183	Toxscan	0.0032	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	ND	0.00080	0.010	ND	0.0018	0.010	ND
07/02/03	183	Caltest	0.003	0.1	ND	0.002	0.1	ND	0.002	0.1	ND	0.002	0.1	ND	0.002	0.05	ND	0.002	0.1	ND
07/02/03	183	EBMUD	0.0064	0.050	ND	0.0048	0.25	ND	0.0038	0.25	ND	0.0038	0.050	ND	0.0033	0.10	ND	0.0028	0.050	ND
08/05/03	217	Toxscan	0.0032	0.020	ND	0.0059	0.010	0.017	0.0021	0.010	0.0024	0.0012	0.010	0.072	0.00080	0.010	ND	0.0018	0.010	ND
08/05/03	217	Caltest	0.003	0.1	ND	0.002	0.1	ND	0.002	0.1	ND	0.002	0.1	ND	0.002	0.05	ND	0.002	0.1	ND
08/05/03	217	EBMUD	0.0064	0.050	0.011	0.0048	0.25	ND	0.0038	0.25	ND	0.0038	0.050	ND	0.0033	0.10	ND	0.0028	0.050	0.0056
09/03/03	246	Toxscan	0.0032	0.020	ND	0.0059	0.010	0.025	0.0021	0.010	ND	0.0012	0.010	0.028	0.00080	0.010	ND	0.0018	0.010	ND
09/03/03	246	Caltest	0.003	0.1	ND	0.002	0.1	ND	0.002	0.1	ND	0.002	0.1	ND	0.002	0.05	ND	0.002	0.1	ND
09/03/03	246	EBMUD	0.0064	0.050	ND	0.0048	0.25	ND	0.0038	0.25	ND	0.0038	0.050	ND	0.0033	0.10	ND	0.0028	0.050	ND
10/07/03	280	Toxscan	0.0032	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	ND	0.00080	0.010	ND	0.0018	0.010	ND

Organochlorine Pesticide Analyte List

Raw Sewage		Lab	4,4'-DDT			4,4'-DDE			4,4'-DDD			Dieldrin			Endosulfan (alpha)			Endosulfan (beta)		
Criterion (ug/L; ppb)			0.00059			0.00059			0.00084			0.00014			0.0087			0.0087		
Analytical Method			EPA 608			EPA 608			EPA 608			EPA 608			EPA 608			EPA 608		
10/07/03	280	Caltest	0.003	0.2	ND	0.002	0.2	ND	0.002	0.2	ND	0.002	0.2	ND	0.002	0.10	ND	0.002	0.2	ND
10/07/03	280	EBMUD	0.0064	0.10	ND	0.0048	0.50	ND	0.0038	0.50	ND	0.0038	0.10	ND	0.0033	0.20	ND	0.0028	0.10	ND
11/04/03	308	Toxscan	0.0032	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	0.055	0.00080	0.010	ND	0.0018	0.010	ND
11/04/03	308	Caltest	0.003	0.3	ND	0.002	0.3	ND	0.002	0.3	ND	0.002	0.3	ND	0.002	0.12	ND	0.002	0.1	ND
11/04/03	308	EBMUD	0.013	0.10	ND	0.0097	0.50	0.014	0.0077	0.50	ND	0.0077	0.10	ND	0.0067	0.20	ND	0.0055	0.10	ND

*: two duplicates data average value

: not available

xxxx

xxxx

Organochlorine Pesticide Analyte List

Raw Sewage		Lab	Endosulfan Sulfate			Endrin			Endrin Aldehyde			Heptachlor			Heptachlor Epoxide			Toxaphene		
Criterion (ug/L; ppb)			240			0.0023			0.81			0.00021			0.00011			0.00075		
Analytical Method			EPA 608			EPA 608			EPA 608			EPA 608			EPA 608			EPA 608		
Units			ug/L			ug/L			ug/L			ug/L			ug/L			ug/L		
Date	Julian		MDL	ML	Result	MDL	ML	Result	MDL	ML	Result	MDL	ML	Result	MDL	ML	Result	MDL	ML	Result
03/05/02	64	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	0.025	0.0098	0.010	ND	0.001	0.001	ND	0.093	0.20	ND
08/28/02	240	Toxscan	0.0030	0.010		0.0012	0.010		0.0031	0.010		0.0098	0.010		0.001	0.001		0.093	0.20	
09/03/02	246	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.001	0.001	ND	0.093	0.20	ND
10/01/02	274	Toxscan*	0.0030	0.010		0.0012	0.010		0.0031	0.010		0.0098	0.010		0.001	0.001		0.093	0.20	
10/16/02	289	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.001	0.001	ND	0.093	0.20	ND
10/16/02	289	Caltest	0.0020	0.05	ND	0.002	0.05	ND	0.002	0.05	ND	0.003	0.05	ND	0.003	0.05	ND	0.4	2.5	ND
10/16/02	289	EBMUD	0.00078	0.050	ND	0.00063	0.010	ND	0.00042	0.010	ND	0.00084	0.010	ND	0.0012	0.010	ND	0.072	0.50	ND
11/06/02	310	Toxscan	0.0030	0.020	ND	0.0012	0.020	ND	0.0031	0.020	ND	0.0098	0.020	ND	0.0010	0.002	ND	0.093	0.40	ND
11/06/02	310	Caltest	0.0020	0.05	ND	0.002	0.05	ND	0.002	0.05	ND	0.003	0.05	ND	0.003	0.05	ND	0.4	2.5	ND
11/06/02	310	EBMUD	0.00078	0.050	ND	0.00063	0.010	ND	0.00042	0.010	ND	0.00084	0.010	ND	0.0012	0.010	ND	0.072	0.50	ND
12/03/02	337	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.0010	0.001	ND	0.093	0.20	ND
12/03/02	337	Caltest	0.0020	0.05	ND	0.002	0.05	ND	0.002	0.05	ND	0.003	0.05	ND	0.003	0.05	ND	0.4	2.5	ND
12/03/02	337	EBMUD	0.00078	0.050	ND	0.00063	0.010	ND	0.00042	0.010	ND	0.00084	0.010	ND	0.0012	0.010	ND	0.072	0.50	ND
12/17/02	351	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.0010	0.001	ND	0.093	0.20	ND
12/17/02	351	Caltest	0.0020	0.05	ND	0.002	0.05	ND	0.002	0.05	ND	0.003	0.05	ND	0.003	0.05	ND	0.4	2.5	ND
12/17/02	351	EBMUD	0.00078	0.050	ND	0.00063	0.010	ND	0.00042	0.010	ND	0.00084	0.010	ND	0.0012	0.010	ND	0.072	0.50	ND
01/07/03	7	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.0010	0.001	ND	0.093	0.20	ND
01/07/03	7	Caltest	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.003	0.01	ND	0.003	0.01	ND	0.4	0.5	ND
01/07/03	7	EBMUD	0.00078	0.050	ND	0.00063	0.010	ND	0.00042	0.010	ND	0.00084	0.010	ND	0.0012	0.010	ND	0.072	0.50	ND
02/04/03	35	Toxscan*	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.0010	0.001	ND	0.093	0.20	ND
02/04/03	35	Caltest*	0.002	0.1	ND	0.002	0.1	ND	0.002	0.05	ND	0.003	0.05	ND	0.003	0.05	ND	0.4	1	ND
02/04/03	35	EBMUD*	0.0039	0.25	ND	0.0031	0.050	ND	0.0021	0.050	ND	0.0042	0.050	ND	0.0058	0.050	ND	0.36	2.5	ND
03/04/03	63	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.0010	0.001	ND	0.093	0.20	ND
03/04/03	63	Caltest	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.003	0.01	ND	0.003	0.01	ND	0.4	0.5	ND
03/04/03	63	EBMUD	0.0039	0.25	ND	0.0031	0.050	ND	0.0021	0.050	ND	0.0042	0.050	ND	0.0058	0.050	ND	0.36	2.5	ND
04/01/03	91	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.0010	0.010	ND	0.093	0.20	ND
04/01/03	91	Caltest	0.002	0.1	ND	0.002	0.1	ND	0.002	0.05	ND	0.003	0.05	ND	0.003	0.05	ND	0.4	1	ND
04/01/03	91	EBMUD	0.0039	0.25	ND	0.0031	0.050	ND	0.0021	0.050	ND	0.0042	0.050	ND	0.0058	0.050	ND	0.36	2.5	ND
05/06/03	126	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.0010	0.010	ND	0.093	0.20	ND
05/06/03	126	Caltest	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.003	0.01	ND	0.003	0.01	ND	0.4	0.5	ND
05/06/03	126	EBMUD	0.0078	0.50	ND	0.0063	0.10	ND	0.0042	0.10	ND	0.0084	0.10	ND	0.012	0.10	ND	0.72	5.0	ND
06/03/03	154	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.0010	0.001	ND	0.093	0.20	ND
06/03/03	154	Caltest	0.002	0.1	ND	0.002	0.1	ND	0.002	0.05	ND	0.003	0.05	ND	0.003	0.05	ND	0.4	1	ND
06/03/03	154	EBMUD	0.0039	0.25	ND	0.0031	0.050	ND	0.0021	0.050	ND	0.0042	0.050	ND	0.0058	0.050	ND	0.36	2.5	ND
07/02/03	183	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.0010	0.001	ND	0.093	0.20	ND
07/02/03	183	Caltest	0.002	0.1	ND	0.002	0.1	ND	0.002	0.05	ND	0.003	0.05	ND	0.003	0.05	ND	0.4	1	ND
07/02/03	183	EBMUD	0.0039	0.25	ND	0.0031	0.050	ND	0.0021	0.050	ND	0.0042	0.050	ND	0.0058	0.050	ND	0.36	2.5	ND
08/05/03	217	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.0010	0.001	ND	0.093	0.20	ND
08/05/03	217	Caltest	0.002	0.1	ND	0.002	0.1	ND	0.002	0.05	ND	0.003	0.05	ND	0.003	0.05	ND	0.4	1	ND
08/05/03	217	EBMUD	0.0039	0.25	ND	0.0031	0.050	ND	0.0021	0.050	ND	0.0042	0.050	ND	0.0058	0.050	ND	0.36	2.5	ND
09/03/03	246	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.0010	0.001	ND	0.093	0.20	ND
09/03/03	246	Caltest	0.002	0.1	ND	0.002	0.1	ND	0.002	0.05	ND	0.003	0.05	ND	0.003	0.05	ND	0.4	1	ND
09/03/03	246	EBMUD	0.0039	0.25	ND	0.0031	0.050	ND	0.0021	0.050	ND	0.0042	0.050	ND	0.0058	0.050	ND	0.36	2.5	ND
10/07/03	280	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.0010	0.001	ND	0.093	0.20	ND

Organochlorine Pesticide Analyte List

Raw Sewage		Lab	Endosulfan Sulfate			Endrin			Endrin Aldehyde			Heptachlor			Heptachlor Epoxide			Toxaphene		
Criterion (ug/L; ppb)			240			0.0023			0.81			0.00021			0.00011			0.00075		
Analytical Method			EPA 608			EPA 608			EPA 608			EPA 608			EPA 608			EPA 608		
10/07/03	280	Caltest	0.002	0.2	ND	0.002	0.2	ND	0.002	0.10	ND	0.003	0.10	ND	0.003	0.1	ND	0.4	2	ND
10/07/03	280	EBMUD	0.0039	0.50	ND	0.0031	0.10	ND	0.0021	0.10	ND	0.0042	0.10	ND	0.0058	0.10	ND	0.36	5.0	ND
11/04/03	308	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	0.014	0.0010	0.001	ND	0.093	0.20	ND
11/04/03	308	Caltest	0.002	0.3	ND	0.002	0.3	ND	0.002	0.12	ND	0.003	0.12	ND	0.003	0.12	ND	0.4	3	ND
11/04/03	308	EBMUD	0.0078	0.50	ND	0.0063	0.10	ND	0.0042	0.10	ND	0.0084	0.10	ND	0.012	0.10	ND	0.72	5.0	ND

*: two duplicates data average value

: not available

xxxx

xxxx

Appendix II

Organochlorine Pesticide Analyte List

Final Effluent Data		Lab	Aldrin			Alpha-BHC			Beta-BHC			Delta-BHC			Gamma-BHC (Lindane)			Chlordane		
Criterion (ug/L; ppb)			0.00014			0.013			0.046			NA			0.063			0.00059		
Analytical Method			EPA 608			EPA 608			EPA 608			EPA 608			EPA 608			EPA 608		
Units			ug/L			ug/L			ug/L			ug/L			ug/L			ug/L		
Date	Julian		MDL	ML	Result	MDL	ML	Result	MDL	ML	Result	MDL	ML	Result	MDL	ML	Result	MDL	ML	Result
03/05/02	64	Toxscan	0.0017	0.005	0.032	0.0071	0.010	ND	0.0050	0.005	ND	0.0016	0.005	ND	0.0031	0.010	ND	0.090	0.10	ND
08/28/02	240	Toxscan	0.0017	0.005	0.027	0.0071	0.010	0.035	0.0050	0.005	ND	0.0016	0.005	ND	0.0031	0.010	ND	0.090	0.10	ND
09/03/02	246	Toxscan	0.0017	0.005	ND	0.0071	0.010	ND	0.0050	0.005	ND	0.0016	0.005	ND	0.0031	0.010	ND	0.090	0.10	ND
10/01/02	274	Toxscan*	0.0017	0.005	0.054	0.0071	0.010	0.044	0.0050	0.005	0.024	0.0016	0.005	0.023	0.0031	0.010	0.064	0.090	0.10	ND
10/16/02	289	Caltest	0.003	0.005	ND	0.003	0.01	ND	0.004	0.005	ND	0.002	0.005	ND	0.003	0.01	ND	0.005	0.02	ND
10/16/02	289	EBMUD	0.0018	0.0050	0.0032	0.00061	0.010	ND	0.0010	0.0050	ND	0.00064	0.0050	ND	0.0031	0.020	ND	0.014	0.10	ND
10/16/02	289	Toxscan	0.0017	0.005	0.16	0.0071	0.010	0.059	0.0050	0.005	0.020	0.0016	0.005	0.064	0.0031	0.010	0.016	0.090	0.10	ND
11/06/02	310	Caltest	0.003	0.005	ND	0.003	0.01	ND	0.004	0.005	ND	0.002	0.005	ND	0.003	0.01	ND	0.005	0.02	ND
11/06/02	310	EBMUD	0.0018	0.0050	ND	0.00061	0.010	ND	0.00064	0.0050	ND	0.00064	0.0050	ND	0.0031	0.020	0.014	0.014	0.10	ND
11/06/02	310	Toxscan	0.0017	0.01	0.049	0.0071	0.020	0.073	0.0050	0.01	ND	0.0016	0.01	ND	0.0033	0.020	0.021	0.090	0.20	ND
12/03/02	337	Caltest	0.003	0.005	ND	0.003	0.01	ND	0.004	0.005	ND	0.002	0.005	ND	0.003	0.01	ND	0.005	0.02	ND
12/03/02	337	EBMUD	0.0018	0.0050	ND	0.00061	0.010	ND	0.00064	0.0050	ND	0.00064	0.0050	ND	0.0031	0.020	ND	0.014	0.10	ND
12/03/02	337	Toxscan	0.0017	0.005	ND	0.0071	0.010	ND	0.005	0.005	ND	0.0016	0.005	ND	0.0031	0.010	ND	0.090	0.10	ND
12/17/02	351	Caltest	0.003	0.005	ND	0.003	0.01	ND	0.004	0.005	ND	0.002	0.005	ND	0.003	0.01	ND	0.005	0.02	ND
12/17/02	351	EBMUD	0.0018	0.0050	ND	0.00061	0.010	ND	0.00064	0.0050	ND	0.00064	0.0050	ND	0.0031	0.020	ND	0.014	0.10	ND
12/17/02	351	Toxscan	0.0017	0.005	ND	0.0071	0.010	ND	0.005	0.005	ND	0.0016	0.005	ND	0.0031	0.010	ND	0.090	0.10	ND
01/07/03	7	Caltest	0.003	0.005	ND	0.003	0.01	ND	0.004	0.005	ND	0.002	0.005	ND	0.003	0.01	ND	0.005	0.02	ND
01/07/03	7	EBMUD	0.0018	0.0050	ND	0.00061	0.010	ND	0.00064	0.0050	ND	0.00064	0.0050	ND	0.0031	0.020	ND	0.014	0.10	ND
01/07/03	7	Toxscan	0.0017	0.005	0.006	0.0071	0.010	ND	0.005	0.005	ND	0.0016	0.005	ND	0.0031	0.010	ND	0.090	0.10	ND
02/04/03	35	Caltest*	0.003	0.005	ND	0.003	0.01	ND	0.004	0.005	ND	0.002	0.005	ND	0.003	0.01	ND	0.005	0.02	ND
02/04/03	35	EBMUD*	0.0018	0.0050	ND	0.00061	0.010	ND	0.00064	0.0050	ND	0.00064	0.0050	ND	0.0031	0.020	ND	0.014	0.10	ND
02/04/03	35	Toxscan*	0.0017	0.005	ND	0.0071	0.010	ND	0.005	0.005	ND	0.0016	0.005	ND	0.0031	0.010	ND	0.090	0.10	ND
03/04/03	63	Caltest	0.003	0.005	ND	0.003	0.01	ND	0.004	0.005	ND	0.002	0.005	ND	0.003	0.01	ND	0.005	0.02	ND
03/04/03	63	EBMUD	0.0018	0.0050	ND	0.00061	0.010	ND	0.00064	0.0050	ND	0.00064	0.0050	ND	0.0031	0.020	0.014	0.014	0.10	ND
03/04/03	63	Toxscan	0.0017	0.0050	0.0054	0.0071	0.010	ND	0.005	0.005	ND	0.0016	0.005	ND	0.0031	0.010	0.041	0.090	0.10	ND
04/01/03	91	Caltest	0.003	0.005	ND	0.003	0.01	ND	0.004	0.005	ND	0.002	0.005	ND	0.003	0.01	ND	0.005	0.02	ND
04/01/03	91	EBMUD	0.0018	0.0050	ND	0.00061	0.010	ND	0.00064	0.0050	ND	0.00064	0.0050	ND	0.0031	0.020	ND	0.014	0.10	ND
04/01/03	91	Toxscan	0.0017	0.005	ND	0.0071	0.010	ND	0.005	0.005	ND	0.0016	0.005	ND	0.0031	0.010	0.016	0.090	0.10	ND
05/06/03	126	Caltest	0.003	0.005	ND	0.003	0.01	ND	0.004	0.005	ND	0.002	0.005	ND	0.003	0.01	ND	0.005	0.02	ND
05/06/03	126	EBMUD	0.0018	0.0050	ND	0.00061	0.010	ND	0.00064	0.0050	ND	0.00064	0.0050	ND	0.0031	0.020	ND	0.014	0.10	ND
05/06/03	126	Toxscan	0.0017	0.005	ND	0.0071	0.010	ND	0.005	0.005	ND	0.0016	0.005	ND	0.0031	0.010	ND	0.090	0.10	ND
06/03/03	154	Caltest	0.003	0.005	ND	0.003	0.01	ND	0.004	0.005	ND	0.002	0.005	ND	0.003	0.01	ND	0.005	0.02	ND
06/03/03	154	EBMUD	0.0018	0.0050	ND	0.00061	0.010	ND	0.00064	0.0050	ND	0.00064	0.0050	ND	0.0031	0.020	ND	0.014	0.10	ND
06/03/03	154	Toxscan	0.0017	0.0050	ND	0.0071	0.010	ND	0.0050	0.0050	ND	0.0016	0.0050	ND	0.0031	0.010	ND	0.090	0.10	ND
07/02/03	183	Caltest	0.003	0.005	ND	0.003	0.01	ND	0.004	0.005	ND	0.002	0.005	ND	0.003	0.01	ND	0.005	0.02	ND
07/02/03	183	EBMUD	0.0018	0.0050	ND	0.00061	0.010	ND	0.00064	0.0050	ND	0.00064	0.0050	ND	0.0031	0.020	ND	0.014	0.10	ND
07/02/03	183	Toxscan	0.0017	0.0050	ND	0.0071	0.010	ND	0.0050	0.0050	ND	0.0016	0.0050	ND	0.0031	0.010	ND	0.090	0.10	ND
08/05/03	217	Caltest	0.003	0.005	ND	0.003	0.01	ND	0.004	0.005	ND	0.002	0.005	ND	0.003	0.01	ND	0.005	0.02	ND

Organochlorine Pesticide Analyte List

Final Effluent Data		Lab	Aldrin			Alpha-BHC			Beta-BHC			Delta-BHC			Gamma-BHC (Lindane)			Chlordane		
Criterion (ug/L; ppb)			0.00014			0.013			0.046			NA			0.063			0.00059		
Analytical Method			EPA 608			EPA 608			EPA 608			EPA 608			EPA 608			EPA 608		
08/05/03	217	EBMUD	0.0018	0.0050	ND	0.00061	0.010	ND	0.00064	0.0050	ND	0.00064	0.0050	ND	0.0031	0.020	ND	0.014	0.10	ND
08/05/03	217	Toxscan	0.0017	0.0050	ND	0.0071	0.010	ND	0.0050	0.0050	ND	0.0016	0.0050	ND	0.0031	0.010	0.0078	0.0020	0.010	ND
09/03/03	246	Caltest	0.003	0.005	ND	0.003	0.01	ND	0.004	0.005	ND	0.002	0.005	ND	0.003	0.01	ND	0.005	0.02	ND
09/03/03	246	EBMUD	0.0018	0.0050	ND	0.00061	0.010	ND	0.0010	0.0050	ND	0.00064	0.0050	ND	0.0031	0.020	ND	0.014	0.10	ND
09/03/03	246	Toxscan	0.0017	0.0050	ND	0.0071	0.010	ND	0.0050	0.0050	ND	0.0016	0.0050	ND	0.0031	0.010	ND	0.0020	0.010	ND
10/07/03	280	Caltest	0.003	0.005	ND	0.003	0.01	ND	0.004	0.005	ND	0.002	0.005	ND	0.003	0.01	ND	0.005	0.02	ND
10/07/03	280	EBMUD	0.0018	0.0050	ND	0.00061	0.010	ND	0.0010	0.0050	ND	0.0016	0.0050	ND	0.0031	0.020	ND	0.014	0.10	ND
10/07/03	280	Toxscan	0.0017	0.0050	ND	0.0071	0.010	ND	0.0050	0.0050	ND	0.0016	0.0050	ND	0.0031	0.010	ND	0.0020	0.010	ND
11/04/03	308	Caltest	0.003	0.005	ND	0.003	0.01	ND	0.004	0.005	ND	0.002	0.005	ND	0.003	0.01	ND	0.005	0.02	ND
11/04/03	308	EBMUD	0.0018	0.0050	ND	0.00061	0.010	ND	0.0010	0.0050	ND	0.0016	0.0050	ND	0.0031	0.020	ND	0.014	0.10	ND
11/04/03	308	Toxscan	0.0017	0.0050	ND	0.0071	0.010	ND	0.0050	0.0050	ND	0.0016	0.0050	0.0058	0.0031	0.010	ND	0.0020	0.010	ND
12/02/03	336	Caltest	0.003	0.005	ND	0.003	0.01	ND	0.004	0.005	ND	0.002	0.005	ND	0.003	0.01	ND	0.005	0.02	ND
12/02/03	336	EBMUD	0.0018	0.0050	ND	0.00061	0.010	ND	0.0010	0.0050	ND	0.0016	0.0050	ND	0.0031	0.020	ND	0.014	0.10	ND
12/02/03	336	Toxscan	0.0017	0.0050	ND	0.0071	0.010	ND	0.0050	0.0050	ND	0.0016	0.0050	ND	0.0031	0.010	ND	0.0020	0.010	ND

*: two duplicates data average value

xxxx Detected

xxxx Detected, Not Quantified

Organochlorine Pesticide Analyte List

Final Effluent Data		Lab	4,4'-DDT			4,4'-DDE			4,4'-DDD			Dieldrin			Endosulfan (alpha)			Endosulfan (beta)		
Criterion (ug/L; ppb)			0.00059			0.00059			0.00084			0.00014			0.0087			0.0087		
Analytical Method			EPA 608			EPA 608			EPA 608			EPA 608			EPA 608			EPA 608		
Units			ug/L			ug/L			ug/L			ug/L			ug/L			ug/L		
Date	Julian		MDL	ML	Result	MDL	ML	Result	MDL	ML	Result	MDL	ML	Result	MDL	ML	Result	MDL	ML	Result
03/05/02	64	Toxscan	0.0150	0.020	ND	0.0059	0.010	0.018	0.0021	0.010	ND	0.0012	0.010	ND	0.0008	0.010	ND	0.0018	0.010	ND
08/28/02	240	Toxscan	0.0150	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	ND	0.0008	0.010	ND	0.0018	0.010	ND
09/03/02	246	Toxscan	0.0150	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	ND	0.0008	0.010	ND	0.0018	0.010	ND
10/01/02	274	Toxscan*	0.0150	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	0.016	0.0008	0.010	ND	0.0018	0.010	ND
10/16/02	289	Caltest	0.003	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND
10/16/02	289	EBMUD	0.0013	0.010	ND	0.00097	0.050	ND	0.00077	0.050	ND	0.00077	0.010	ND	0.00067	0.02	ND	0.00055	0.010	ND
10/16/02	289	Toxscan	0.0150	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	0.024	0.0008	0.010	ND	0.0018	0.010	ND
11/06/02	310	Caltest	0.003	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND
11/06/02	310	EBMUD	0.0013	0.010	ND	0.00097	0.050	ND	0.00077	0.050	ND	0.00077	0.010	0.0020	0.00067	0.02	ND	0.00055	0.010	0.0027
11/06/02	310	Toxscan	0.0032	0.040	0.012	0.0059	0.020	0.0095	0.0021	0.020	ND	0.0012	0.020	0.037	0.0008	0.020	ND	0.0018	0.020	ND
12/03/02	337	Caltest	0.003	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND
12/03/02	337	EBMUD	0.0013	0.010	ND	0.00097	0.050	ND	0.00077	0.050	ND	0.00077	0.010	ND	0.00067	0.02	ND	0.00055	0.010	ND
12/03/02	337	Toxscan	0.015	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	ND	0.0008	0.010	ND	0.0018	0.010	ND
12/17/02	351	Caltest	0.003	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND
12/17/02	351	EBMUD	0.0013	0.010	ND	0.00097	0.050	ND	0.00077	0.050	ND	0.00077	0.010	ND	0.00067	0.02	ND	0.00055	0.010	ND
12/17/02	351	Toxscan	0.015	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	ND	0.0008	0.010	ND	0.0018	0.010	ND
01/07/03	7	Caltest	0.003	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND
01/07/03	7	EBMUD	0.0013	0.010	ND	0.00097	0.050	ND	0.00077	0.050	ND	0.00077	0.010	ND	0.00067	0.02	ND	0.00055	0.010	ND
01/07/03	7	Toxscan	0.015	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	ND	0.0008	0.010	ND	0.0018	0.010	ND
02/04/03	35	Caltest*	0.003	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND
02/04/03	35	EBMUD*	0.0013	0.010	ND	0.00097	0.050	ND	0.00077	0.050	ND	0.00077	0.010	ND	0.00067	0.02	ND	0.00055	0.010	0.0056
02/04/03	35	Toxscan*	0.015	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	ND	0.0008	0.010	ND	0.0018	0.010	ND
03/04/03	63	Caltest	0.003	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND
03/04/03	63	EBMUD	0.0013	0.010	ND	0.00097	0.050	ND	0.00077	0.050	ND	0.00077	0.010	ND	0.00067	0.02	ND	0.00055	0.010	ND
03/04/03	63	Toxscan	0.015	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	ND	0.0008	0.010	ND	0.0018	0.010	ND
04/01/03	91	Caltest	0.003	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND
04/01/03	91	EBMUD	0.0013	0.010	ND	0.00097	0.050	ND	0.00077	0.050	ND	0.00077	0.010	ND	0.00067	0.02	ND	0.00055	0.010	0.0038
04/01/03	91	Toxscan	0.015	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	ND	0.0008	0.010	ND	0.0018	0.010	ND
05/06/03	126	Caltest	0.003	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND
05/06/03	126	EBMUD	0.0013	0.010	ND	0.00097	0.050	ND	0.00077	0.050	ND	0.00077	0.010	ND	0.00067	0.02	ND	0.00055	0.010	0.0029
05/06/03	126	Toxscan	0.015	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	ND	0.0008	0.010	ND	0.0018	0.010	ND
06/03/03	154	Caltest	0.003	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND
06/03/03	154	EBMUD	0.0013	0.010	ND	0.00097	0.050	ND	0.00077	0.050	ND	0.00077	0.010	ND	0.00067	0.02	ND	0.00055	0.010	ND
06/03/03	154	Toxscan	0.0032	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	0.0093	0.00080	0.010	ND	0.0018	0.010	ND
07/02/03	183	Caltest	0.003	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND
07/02/03	183	EBMUD	0.0013	0.010	ND	0.00097	0.050	ND	0.00077	0.050	ND	0.00077	0.010	ND	0.00067	0.02	ND	0.00055	0.010	ND
07/02/03	183	Toxscan	0.0032	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	0.0093	0.00080	0.010	ND	0.0018	0.010	ND
08/05/03	217	Caltest	0.003	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND

Organochlorine Pesticide Analyte List

Final Effluent Data		Lab	4,4'-DDT			4,4'-DDE			4,4'-DDD			Dieldrin			Endosulfan (alpha)			Endosulfan (beta)		
Criterion (ug/L; ppb)			0.00059			0.00059			0.00084			0.00014			0.0087			0.0087		
Analytical Method			EPA 608			EPA 608			EPA 608			EPA 608			EPA 608			EPA 608		
08/05/03	217	EBMUD	0.0013	0.010	ND	0.00097	0.050	ND	0.00077	0.050	ND	0.00077	0.010	ND	0.00067	0.02	ND	0.00055	0.010	ND
08/05/03	217	Toxscan	0.0032	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	ND	0.00080	0.010	ND	0.0018	0.010	ND
09/03/03	246	Caltest	0.003	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND
09/03/03	246	EBMUD	0.0013	0.010	ND	0.00097	0.050	ND	0.00077	0.050	ND	0.00077	0.010	ND	0.00067	0.020	ND	0.00055	0.010	ND
09/03/03	246	Toxscan	0.0032	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	ND	0.00080	0.010	ND	0.0018	0.010	ND
10/07/03	280	Caltest	0.003	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND
10/07/03	280	EBMUD	0.0013	0.010	ND	0.00097	0.050	ND	0.00077	0.050	ND	0.00077	0.010	ND	0.00067	0.020	ND	0.00055	0.010	ND
10/07/03	280	Toxscan	0.0032	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	ND	0.00080	0.010	ND	0.0018	0.010	ND
11/04/03	308	Caltest	0.003	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND
11/04/03	308	EBMUD	0.0013	0.010	ND	0.00097	0.050	ND	0.00077	0.050	ND	0.00077	0.010	ND	0.00067	0.020	ND	0.00055	0.010	ND
11/04/03	308	Toxscan	0.0032	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	ND	0.00080	0.010	ND	0.0018	0.010	ND
12/02/03	336	Caltest	0.003	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND
12/02/03	336	EBMUD	0.0013	0.010	ND	0.00097	0.050	ND	0.00077	0.050	ND	0.00077	0.010	ND	0.00067	0.020	ND	0.00055	0.010	ND
12/02/03	336	Toxscan	0.0032	0.020	ND	0.0059	0.010	ND	0.0021	0.010	ND	0.0012	0.010	ND	0.00080	0.010	ND	0.0018	0.010	ND

*: two duplicates data average value

xxxx Detected

xxxx Detected, Not

Organochlorine Pesticide Analyte List

Final Effluent Data		Lab	Endosulfan Sulfate			Endrin			Endrin Aldehyde			Heptachlor			Heptachlor Epoxide			Toxaphene		
Criterion (ug/L; ppb)			240			0.0023			0.81			0.00021			0.00011			0.00075		
Analytical Method			EPA 608			EPA 608			EPA 608			EPA 608			EPA 608			EPA 608		
Units			ug/L			ug/L			ug/L			ug/L			ug/L			ug/L		
Date	Julian		MDL	ML	Result	MDL	ML	Result	MDL	ML	Result	MDL	ML	Result	MDL	ML	Result	MDL	ML	Result
03/05/02	64	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.001	0.001	ND	0.093	0.20	ND
08/28/02	240	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.001	0.001	ND	0.093	0.20	ND
09/03/02	246	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.001	0.001	ND	0.093	0.20	ND
10/01/02	274	Toxscan*	0.0030	0.010	ND	0.0012	0.010	0.005	0.0031	0.010	0.004	0.0098	0.010	ND	0.001	0.001	ND	0.093	0.20	ND
10/16/02	289	Caltest	0.0020	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.003	0.01	ND	0.003	0.01	ND	0.4	0.5	ND
10/16/02	289	EBMUD	0.00078	0.050	ND	0.00063	0.010	ND	0.00042	0.010	ND	0.00084	0.010	ND	0.0012	0.010	ND	0.072	0.50	ND
10/16/02	289	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.001	0.001	ND	0.093	0.20	ND
11/06/02	310	Caltest	0.0020	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.003	0.01	ND	0.003	0.01	ND	0.4	0.5	ND
11/06/02	310	EBMUD	0.00078	0.050	ND	0.00063	0.010	ND	0.00042	0.010	ND	0.00084	0.010	ND	0.0012	0.010	ND	0.072	0.50	ND
11/06/02	310	Toxscan	0.0030	0.020	ND	0.0012	0.020	ND	0.0031	0.020	ND	0.0098	0.020	0.012	0.0010	0.002	ND	0.093	0.40	ND
12/03/02	337	Caltest	0.0020	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.003	0.01	ND	0.003	0.01	ND	0.4	0.5	ND
12/03/02	337	EBMUD	0.00078	0.050	ND	0.00063	0.010	ND	0.00042	0.010	ND	0.00084	0.010	ND	0.0012	0.010	ND	0.072	0.50	ND
12/03/02	337	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.0010	0.001	ND	0.093	0.20	ND
12/17/02	351	Caltest	0.0020	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.003	0.01	ND	0.003	0.01	ND	0.4	0.5	ND
12/17/02	351	EBMUD	0.00078	0.050	ND	0.00063	0.010	ND	0.00042	0.010	ND	0.00084	0.010	ND	0.0012	0.010	ND	0.072	0.50	ND
12/17/02	351	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.0010	0.001	ND	0.093	0.20	ND
01/07/03	7	Caltest	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.003	0.01	ND	0.003	0.01	ND	0.4	0.5	ND
01/07/03	7	EBMUD	0.00078	0.050	ND	0.00063	0.010	ND	0.00042	0.010	ND	0.00084	0.010	ND	0.0012	0.010	ND	0.072	0.50	ND
01/07/03	7	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.0010	0.001	ND	0.093	0.20	ND
02/04/03	35	Caltest*	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.003	0.01	ND	0.003	0.01	ND	0.4	0.5	ND
02/04/03	35	EBMUD*	0.00078	0.050	ND	0.00063	0.010	ND	0.00042	0.010	ND	0.00084	0.010	ND	0.0012	0.010	0.0057	0.072	0.50	ND
02/04/03	35	Toxscan*	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.0010	0.001	ND	0.093	0.20	ND
03/04/03	63	Caltest	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.003	0.01	ND	0.003	0.01	ND	0.4	0.5	ND
03/04/03	63	EBMUD	0.00078	0.050	0.0021	0.00063	0.010	ND	0.00042	0.010	ND	0.00084	0.010	ND	0.0012	0.010	ND	0.072	0.50	ND
03/04/03	63	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.0010	0.001	ND	0.093	0.20	ND
04/01/03	91	Caltest	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.003	0.01	ND	0.003	0.01	ND	0.4	0.5	ND
04/01/03	91	EBMUD	0.00078	0.050	ND	0.00063	0.010	ND	0.00042	0.010	ND	0.00084	0.010	ND	0.0012	0.010	ND	0.072	0.50	ND
04/01/03	91	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.0010	0.001	ND	0.093	0.20	ND
05/06/03	126	Caltest	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.003	0.01	ND	0.003	0.01	ND	0.4	0.5	ND
05/06/03	126	EBMUD	0.00078	0.050	ND	0.00063	0.010	ND	0.00042	0.010	ND	0.00084	0.010	ND	0.0012	0.010	ND	0.072	0.50	ND
05/06/03	126	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.0010	0.001	ND	0.093	0.20	ND
06/03/03	154	Caltest	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.003	0.01	ND	0.003	0.01	ND	0.4	0.5	ND
06/03/03	154	EBMUD	0.00078	0.050	ND	0.00063	0.010	ND	0.00042	0.010	ND	0.00084	0.010	ND	0.0012	0.010	ND	0.072	0.50	ND
06/03/03	154	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.0010	0.001	ND	0.093	0.20	ND
07/02/03	183	Caltest	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.003	0.01	ND	0.003	0.01	ND	0.4	0.5	ND
07/02/03	183	EBMUD	0.00078	0.050	ND	0.00063	0.010	ND	0.00042	0.010	ND	0.00084	0.010	ND	0.0012	0.010	ND	0.072	0.50	ND
07/02/03	183	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.0010	0.001	ND	0.093	0.20	ND
08/05/03	217	Caltest	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.003	0.01	ND	0.003	0.01	ND	0.4	0.5	ND

Organochlorine Pesticide Analyte List

Final Effluent Data		Lab	Endosulfan Sulfate			Endrin			Endrin Aldehyde			Heptachlor			Heptachlor Epoxide			Toxaphene		
Criterion (ug/L; ppb)			240			0.0023			0.81			0.00021			0.00011			0.00075		
Analytical Method			EPA 608			EPA 608			EPA 608			EPA 608			EPA 608			EPA 608		
08/05/03	217	EBMUD	0.00078	0.050	ND	0.00063	0.010	ND	0.00042	0.010	ND	0.00084	0.010	ND	0.0012	0.010	ND	0.072	0.50	ND
08/05/03	217	Toxscan	0.0030	0.010	0.0050	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.0010	0.001	ND	0.093	0.20	ND
09/03/03	246	Caltest	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.003	0.01	ND	0.003	0.01	ND	0.4	0.5	ND
09/03/03	246	EBMUD	0.00078	0.050	ND	0.00063	0.010	ND	0.00042	0.010	ND	0.00084	0.010	ND	0.0012	0.010	ND	0.072	0.50	ND
09/03/03	246	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.0010	0.001	ND	0.093	0.20	ND
10/07/03	280	Caltest	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.003	0.01	ND	0.003	0.01	ND	0.4	0.5	ND
10/07/03	280	EBMUD	0.00078	0.050	ND	0.00063	0.010	ND	0.00042	0.010	ND	0.00084	0.010	ND	0.0012	0.010	ND	0.072	0.50	ND
10/07/03	280	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.0010	0.001	ND	0.093	0.20	ND
11/04/03	308	Caltest	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.003	0.01	ND	0.003	0.01	ND	0.4	0.5	ND
11/04/03	308	EBMUD	0.00078	0.050	ND	0.00063	0.010	ND	0.00042	0.010	ND	0.00084	0.010	ND	0.0012	0.010	ND	0.072	0.50	ND
11/04/03	308	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.0010	0.001	ND	0.093	0.20	ND
12/02/03	336	Caltest	0.002	0.01	ND	0.002	0.01	ND	0.002	0.01	ND	0.003	0.01	ND	0.003	0.01	ND	0.4	0.5	ND
12/02/03	336	EBMUD	0.00078	0.050	ND	0.00063	0.010	ND	0.00042	0.010	ND	0.00084	0.010	ND	0.0012	0.010	ND	0.072	0.50	ND
12/02/03	336	Toxscan	0.0030	0.010	ND	0.0012	0.010	ND	0.0031	0.010	ND	0.0098	0.010	ND	0.0010	0.001	ND	0.093	0.20	ND

*: two duplicates data average value

xxxx Detected

xxxx Detected, Not

Appendix III

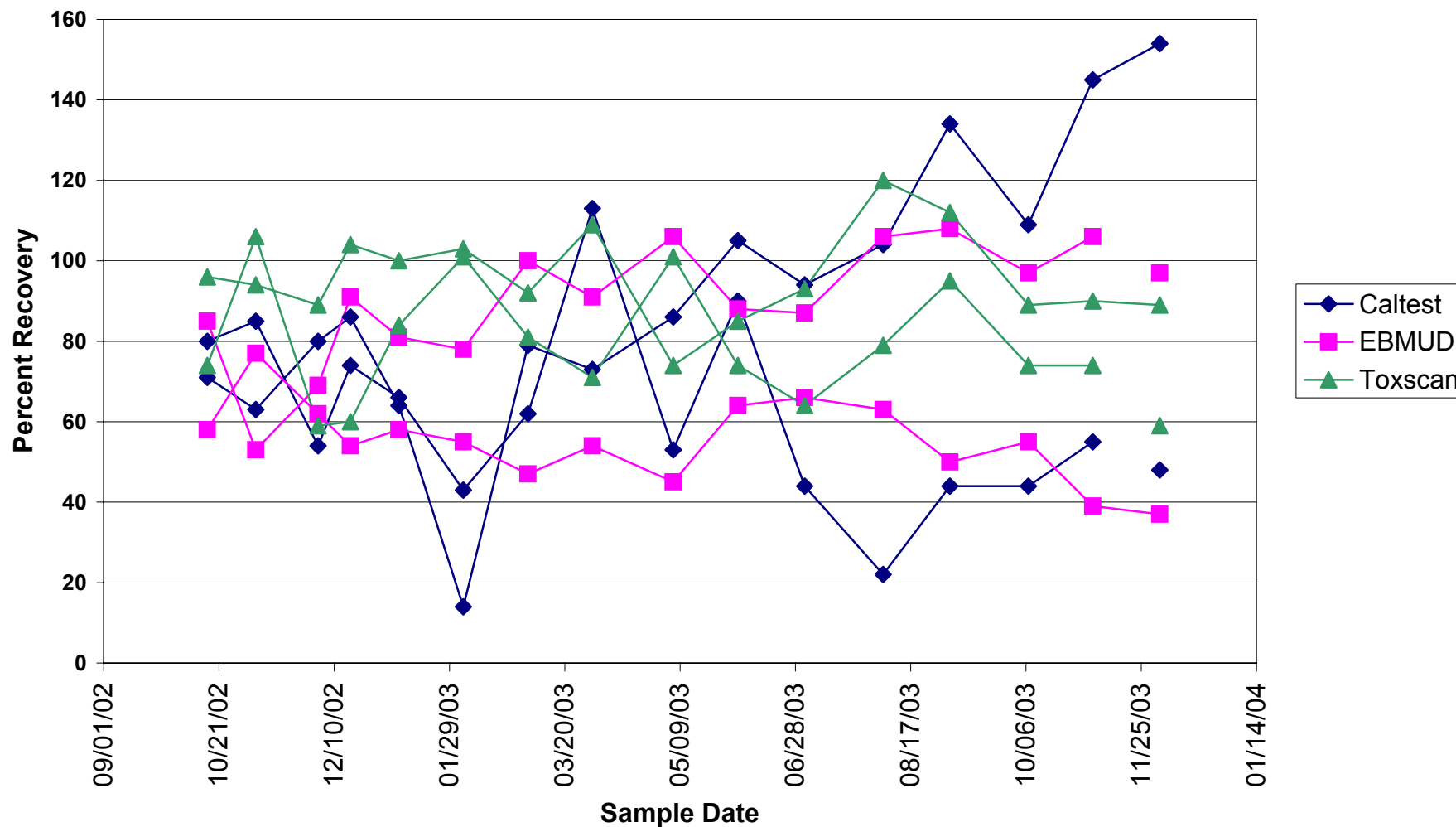
EPA 608 Method Quality Control Data Comparison

Date	Lab	Method Blank	LCS (%REC)	LCS QC Limits (% REC)	MS (%REC)	MSD (%REC)	%REC QC Limits	RPD	RPD QC Limit	Surrogate A	Surrogate B	Surrogate QC Limits
10/16/02	Caltest	<0.005	44	30-130	n.a.	n.a.	n.a.	n.a.	25	80	71	n.a.
11/06/02	Caltest	<0.005	53	30-129	n.a.	n.a.	n.a.	n.a.	25	85	63	n.a.
12/03/02	Caltest	<0.005	57	30-130	n.a.	n.a.	n.a.	n.a.	25	54	80	n.a.
12/17/02	Caltest	<0.005	45	30-130	n.a.	n.a.	n.a.	n.a.	25	74	86	n.a.
01/07/03	Caltest	<0.005	46	30-130	n.a.	n.a.	n.a.	n.a.	25	66	64	n.a.
02/04/03	Caltest	<0.005	50	30-130	n.a.	n.a.	n.a.	n.a.	25	43	14	n.a.
03/04/03	Caltest	<0.005	41	30-130	n.a.	n.a.	n.a.	n.a.	25	62	79	n.a.
04/01/03	Caltest	<0.005	34	30-130	n.a.	n.a.	n.a.	n.a.	25	113	73	n.a.
05/06/03	Caltest	<0.01	38	10-93.0	n.a.	n.a.	n.a.	n.a.	25	53	86	n.a.
06/03/03	Caltest	<0.005	62	10-93.0	n.a.	n.a.	n.a.	n.a.	25	90	105	n.a.
07/02/03	Caltest	<0.005	46	10-93.0	n.a.	n.a.	n.a.	n.a.	25	44	94	n.a.
08/05/03	Caltest	<0.005	20	10-93.0	n.a.	n.a.	n.a.	n.a.	25	22	104	n.a.
09/03/03	Caltest	<0.005	47	10-93.0	n.a.	n.a.	n.a.	n.a.	n.a.	44	134	n.a.
10/07/03	Caltest	<0.005	38	10-93.0	n.a.	n.a.	n.a.	n.a.	25	44	109	n.a.
11/04/03	Caltest	<0.005	48	10-93.0	n.a.	n.a.	n.a.	n.a.	25	55	145	n.a.
12/03/03	Caltest	<0.005	74	10-93.0	n.a.	n.a.	n.a.	n.a.	25	48	154	n.a.
10/16/02	EBMUD	<0.0050	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	85	58	n.a.
11/06/02	EBMUD	<0.0050	68	n.a.	50	40	n.a.	22	n.a.	53	77	n.a.
12/03/02	EBMUD	<0.0050	55	n.a.	42	48	n.a.	11	n.a.	69	62	n.a.
12/17/02	EBMUD	<0.0050	64	n.a.	51	55	n.a.	6	n.a.	91	54	n.a.
01/07/03	EBMUD	<0.0050	66	n.a.	54	64	n.a.	17	n.a.	81	58	n.a.
02/04/03	EBMUD	<0.0050	40	n.a.	45	49	n.a.	9	n.a.	78	55	n.a.
03/04/03	EBMUD	<0.0050	59	n.a.	36	49	n.a.	30	n.a.	100	47	n.a.
04/01/03	EBMUD	<0.0050	47	n.a.	35	42	n.a.	2.3	n.a.	91	54	n.a.
05/06/03	EBMUD	<0.0050	46.2	n.a.	45.2	50	64-136	10	n.a.	106	45	n.a.
06/03/03	EBMUD	<0.0050	53	n.a.	44	46	n.a.	4.4	n.a.	88	64	n.a.
07/02/03	EBMUD	<0.0050	60	n.a.	56	46	n.a.	20	n.a.	87	66	n.a.
08/05/03	EBMUD	<0.0050	52	n.a.	36	47	n.a.	27	n.a.	106	63	n.a.
09/03/03	EBMUD	<0.0050	52	n.a.	48	52	n.a.	8	n.a.	108	50	n.a.
10/07/03	EBMUD	<0.0050	55	n.a.	61	59	n.a.	3	n.a.	97	55	n.a.
11/04/03	EBMUD	<0.0050	52	n.a.	40	42	n.a.	5	n.a.	106	39	n.a.
12/03/03	EBMUD	<0.0050	75	n.a.	34	42	n.a.	21	n.a.	97	37	n.a.

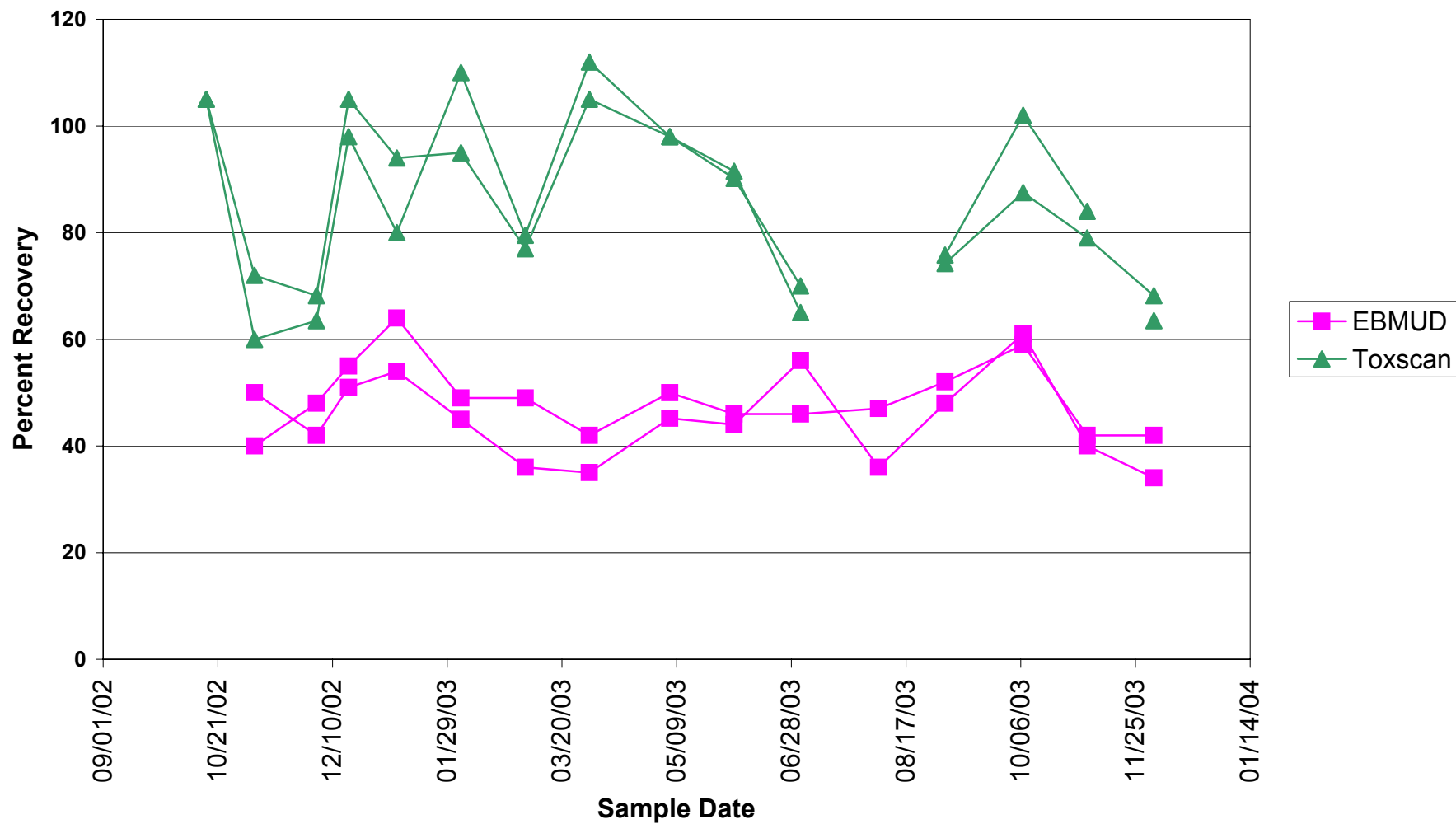
EPA 608 Method Quality Control Data Comparison

Date	Lab	Method Blank	LCS (%REC)	LCS QC Limits (% REC)	MS (%REC)	MSD (%REC)	%REC QC Limits	RPD	RPD QC Limit	Surrogate A	Surrogate B	Surrogate QC Limits
10/16/02	ToxScan	<0.005	63	40-120	105	105	40-120	0	22	74	96	50-150
11/06/02	ToxScan	<0.01	66	40-120	60	72	40-120	18	22	106	94	50-150
12/03/02	ToxScan	<0.005	60	40-120	64	68	40-120	7.2	22	59	89	50-150
12/17/02	ToxScan	<0.005	80	40-120	98	105	40-120	7	22	60	104	50-150
01/07/03	ToxScan	<0.005	81	40-120	80	94	40-120	16	22	84	100	50-150
02/04/03	ToxScan	<0.005	103	40-120	110	95	40-120	14	22	101	103	50-150
03/04/03	ToxScan	<0.0050	75	40-120	80	77	40-120	2.9	22	81	92	50-150
04/01/03	ToxScan	<0.0050	70	40-120	112	105	40-120	6.9	22	71	109	50-150
05/06/03	ToxScan	<0.0050	79	40-120	98	98	40-120	0.2	22	101	74	50-150
06/03/03	ToxScan	<0.0050	65	40-120	92	90	40-120	1.8	22	74	85	50-150
07/02/03	ToxScan	<0.0050	62.5	40-120	65.0	70.0	40-120	7.4	22	64	93	50-150
08/05/03	ToxScan	<0.0050	71.2	40-120	n.a.	n.a.	40-120	n.a.	22	79	120	50-150
09/03/03	ToxScan	<0.0050	88	40-120	76	74	40-120	2.0	22	95	112	50- 150
10/07/03	ToxScan	<0.0050	75.0	40-120	102.0	87.5	40-120	15.8	22	74	89	50-150
11/04/03	ToxScan	<0.0050	62.0	40-120	84	79	40-120	6	22	74	90	50-150
12/03/03	ToxScan	<0.0050	60.0	40-120	63.5	68.2	40-120	7.2	22	59	89	50-150

EPA METHOD 608 SURROGATE RECOVERY



EPA METHOD 608 MATRIX AND MATRIX SPIKE RECOVERY



**EPA METHOD 608
LABORATORY CONTROL STANDARD (LCS)**

